

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE INSTALLATION OF LED COUNTDOWN PEDESTRIAN SIGNAL HEADS, APS PUSHBUTTONS, AND SIGNS AT THE INTERSECTION OF MD 550 AND MD 194 IN FREDERICK COUNTY. MD 194 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE/PERMISSIVE LEFT TURN PHASES FOR NORTH AND SOUTH BOUND MD 194 AND AN ALTERNATE PEDESTRIAN PHASE FOR THE NORTH LEG OF THE INTERSECTION. NO PHASE CHANGES ARE PROPOSED AS PART OF THIS PROJECT.

CONTROLLER REQUIREMENTS

THE EXISTING FULL-TRAFFIC-ACTUATED EIGHT PHASE TRAFFIC SIGNAL CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. AN APS CENTRAL CONTROL UNIT WILL BE INSTALLED BY THE CONTRACTOR.

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
5001	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH	LF	95
5006	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS	LF	320
8002	AUDIBLE / TACTILE PEDESTRIAN PUSHBUTTON	EA	2
8003	BREAKAWAY PEDESTAL POLE - ANY SIZE	EA	2
8004	LED 16 INCH COUNTDOWN PEDESTRIAN SIGNAL	EA	2
8005	REMOVE AND DISPOSE PER ASSIGNMENT	EA	1
8006	PEDESTRIAN EDUCATION SIGN. 2 - R10-3(1) MOD (9"x15" - WOODSBORO PIKE.)	SF	2
8007	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE	LF	15
8008	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED	LF	15
8010	RELOCATE EXISTING GROUND MOUNTED SIGNS	SF	9
8011	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH	EA	2
8013	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)	LF	75
8014	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	LF	215
8015	INSTALL GROUND MOUNTED SIGN	SF	26
8016	APS CENTRAL CONTROL UNIT	EA	1
8020	WOOD SIGN SUPPORT 4 INCH X 4 INCH	LF	33

PHASING CHART

NO PHASE CHANGE

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE LOCATIONS PRIOR TO INSTALLATION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABELING EACH CABLE.
3. ALL UNUSED CABLE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
4. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
5. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS. HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
6. ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE SHA SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. EDWARD RODENHIZER AT 410-787-7652 TO COORDINATE.
7. LOCATION OF ACCESSIBLE PEDESTRIAN PUSHBUTTONS MUST MEET THE LOCATION REQUIREMENTS OF THE MUTCD, SECTION 4E-09 AND FIGURE 4E-2 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNAL: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN RESOLVED. IF NEEDED, A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
8. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM 60"x60" LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN 2%.
9. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA, DOES NOT HAVE TO REACH MORE THAN 18"
10. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.

CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

MR. JOHN CONCANNON
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: (301)624-8140

MS. ANDREA ABEND
UTILITY ENGINEER
PHONE: (301)624-8115

MR. RAYMOND JOHNSON
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: (301)624-8105

CONACT PERSONS FOR OOTS ARE AS FOLLOWS:

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
DIVISION
PHONE: (410)787-7630

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF
TRAFFIC OPERATIONS
(410)787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL OPERATIONS
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MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS
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EQUIPMENT LIST "A"

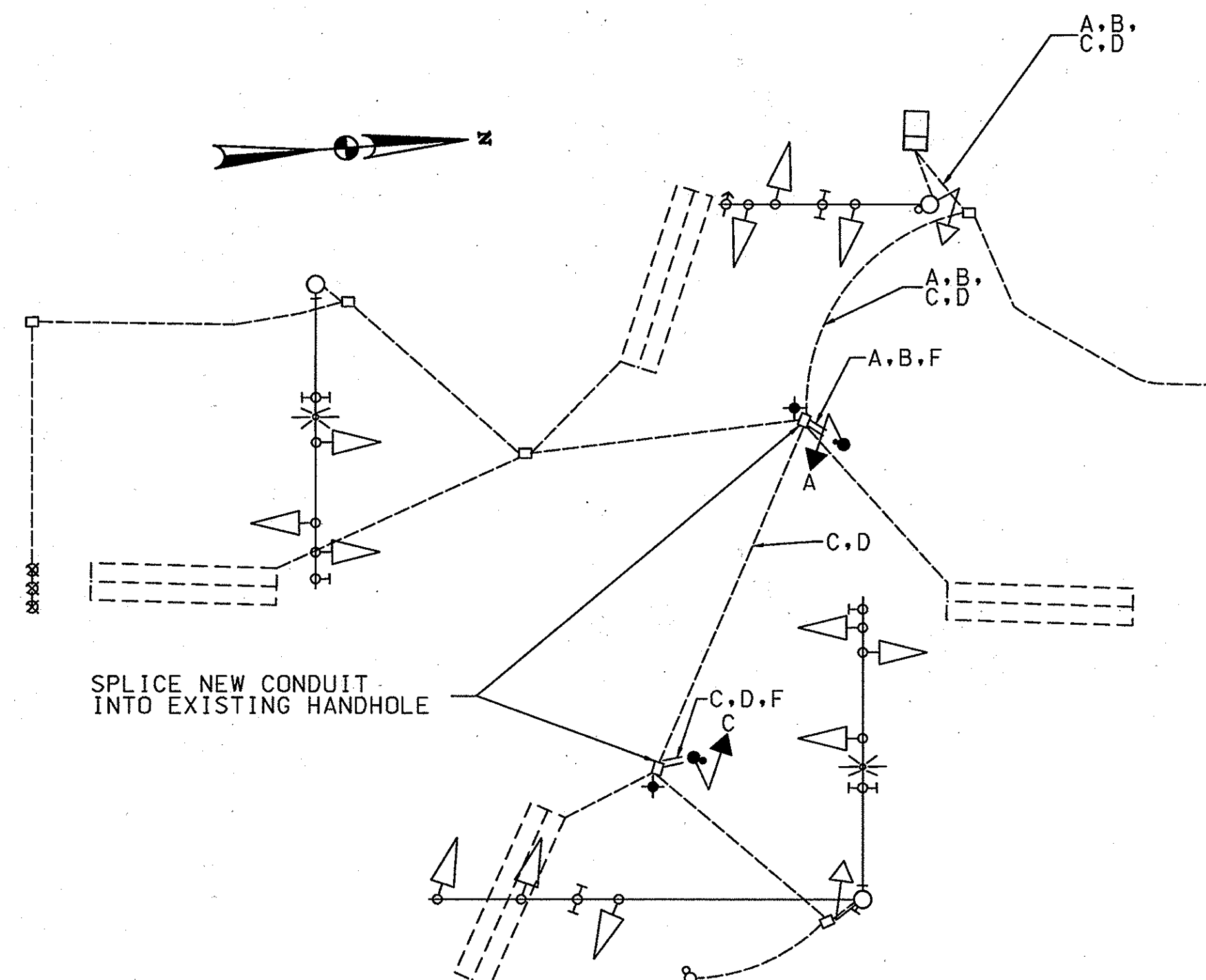
A. EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
9570	SHEET ALUMINUM SIGNS - GROUND MOUNT CONSISTING OF:	SF	25.9
	1 - W11-2 (36"x36") FY		
	3 - M6-2 (21"x15") FY		
	1 - S1-1 (36"x36") FYG		
	1 - S4-3 (24"x8") FYG		

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND RETURNED TO SHA.

ALL MATERIALS AND EQUIPMENT REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



WIRING KEY

A.C	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	D	EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
B	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)	F	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
+	GROUND ROD		

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SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 550 AND MD 194 (WOODSBORO BYPASS)
WOODSBORO, MARYLAND

REVISIONS			
GENERAL INFORMATION SHEET			
SCALE	NONE	DATE	AUGUST, 2007
DESIGNED BY	BJG	COUNTY	FREDERICK
DRAWN BY	BJG	LOGMILE	10019406.45
CHECKED BY	DAE	TIMS NO.	I-785
FAP NO.		TOD NO.	
DRAWING NO.	SG - 2	OF	2
SHEET NO.	12	OF	12

PLOTTED: Thursday, September 27, 2007 AT 09:13 AM
FILE: M:\projects\2007\07056_gaund\Task01_ADA\0000\Traffic\PLANS\MD 550 @ MD 194\MD550g01.dgn